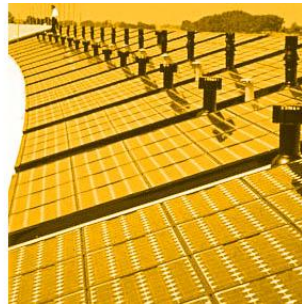


# INDIANA WIND ENERGY



SUPPLY CHAIN POTENTIAL:  
THE 70% SOLUTION



# Overview

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- REPP models the *potential* for major renewable development to provide manufacturing stimulus.
- For wind projects, 70% of the labor required is in the manufacturing stage.
- State and federal policy initiatives must pursue this potential...at this time federal support is largely missing.

# Market Size: Renewable Generation

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- Stabilization wedge approach. Pacala and Socolow call for 2 million MW of solar or wind for one wedge.
- Correction shows one wedge requires removing 15 million tons of carbon per year.
- Requires approximately 18,500 MW per year.
- Ten year program means \$150 billion capital investment. Wind projects will capture major share of market.

# STATE INITIATIVES

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- Assemble portfolio of traditional incentives.
- Look beyond these for *strategic assets*...e.g. submerged lands, transmission access.
- Explore the boundary of the Commerce Clause with initiatives such as a *set aside* for projects with state content.

# Federal Initiatives

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- Get beyond incentives for projects.
- Federal policy expects three outcomes:
  - More CO<sub>2</sub> free generation.
  - Lower costs per kWh.
  - Jobs
- More projects will deliver only one of these.

# Manufacturing Incentives and Support

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- Expand CREB's for renewable manufacturing.
- Provide critical support for supply chain entrants, e.g. provide standards to qualify.

# Innovation

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- The competitive advantage of wind is its ability for rapid technology innovation.
- Successful innovation requires a transmission belt to take basic science to lab prototype to initial commercial scale up to market participant.
- Successful innovation requires a workable, efficient, permanent commercialization policy. The DOE Loan Guarantee needs shock therapy.